

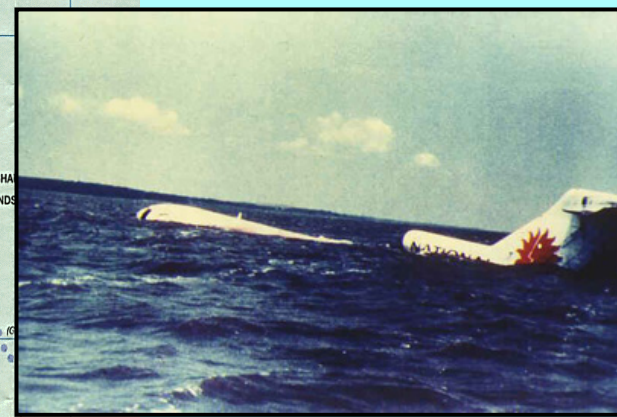
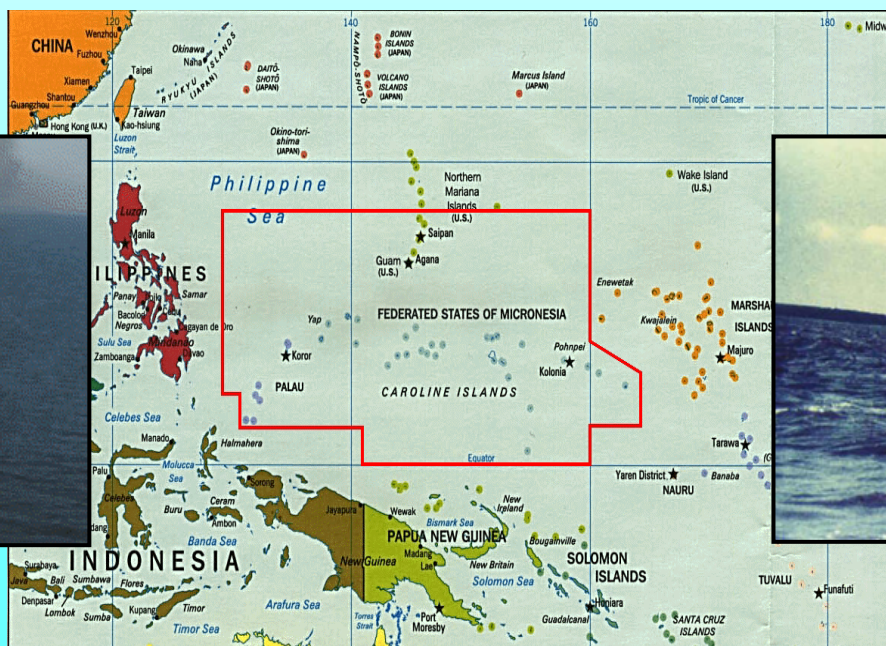


US Coast Guard Sector Guam



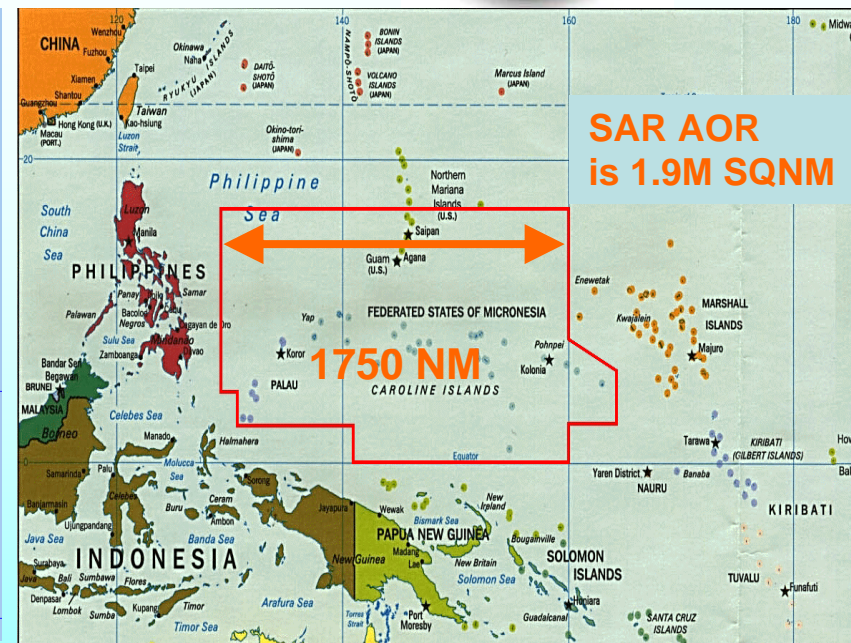
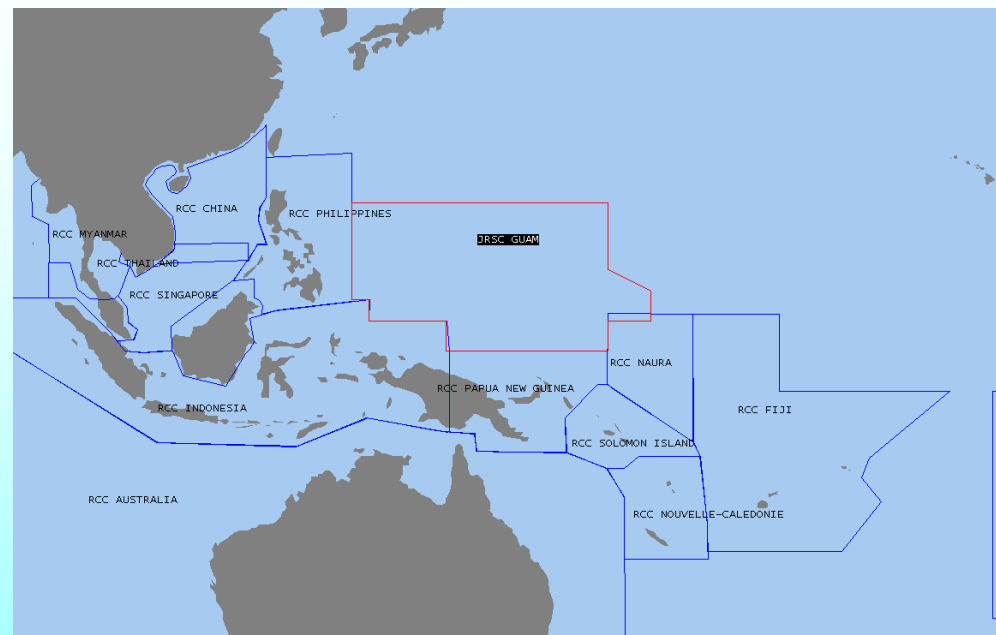
Maritime Mass Rescue Operations CAPT William R. Marhoffer

Commander, US Coast Guard Sector Guam / Joint Rescue Sub-Center Guam





JRSC Guam AOR



- Joint Rescue Sub-Center (JRSC) Guam's area of responsibility for SAR includes Palau, the FSM, Guam, and most of the CNMI.
- In Palau and FSM, JRSC Guam provides assets, search planning, and coordination for open ocean SAR cases that are beyond the range/capabilities of local authorities.
- JRSC Guam can also provide support during complex local SAR events that require additional aircraft, vessels, and planning.



JRSC Guam Overview



Typical assets:

2x 110' Patrol Boats



1x 225' Buoy Tender



USN H-60



AMVER (*Voc Rose* pictured)



USN P-3 Orion



USCG C-130 Hercules



JRSC Structure



Sector Command Center:

- 19 personnel
- 24-hour SAR planner watch
- 24-hour Comms watch

Comms:

VHF, UHF, HF, 800Mhz SmartNet, SATCOM

Primary search planning tools:

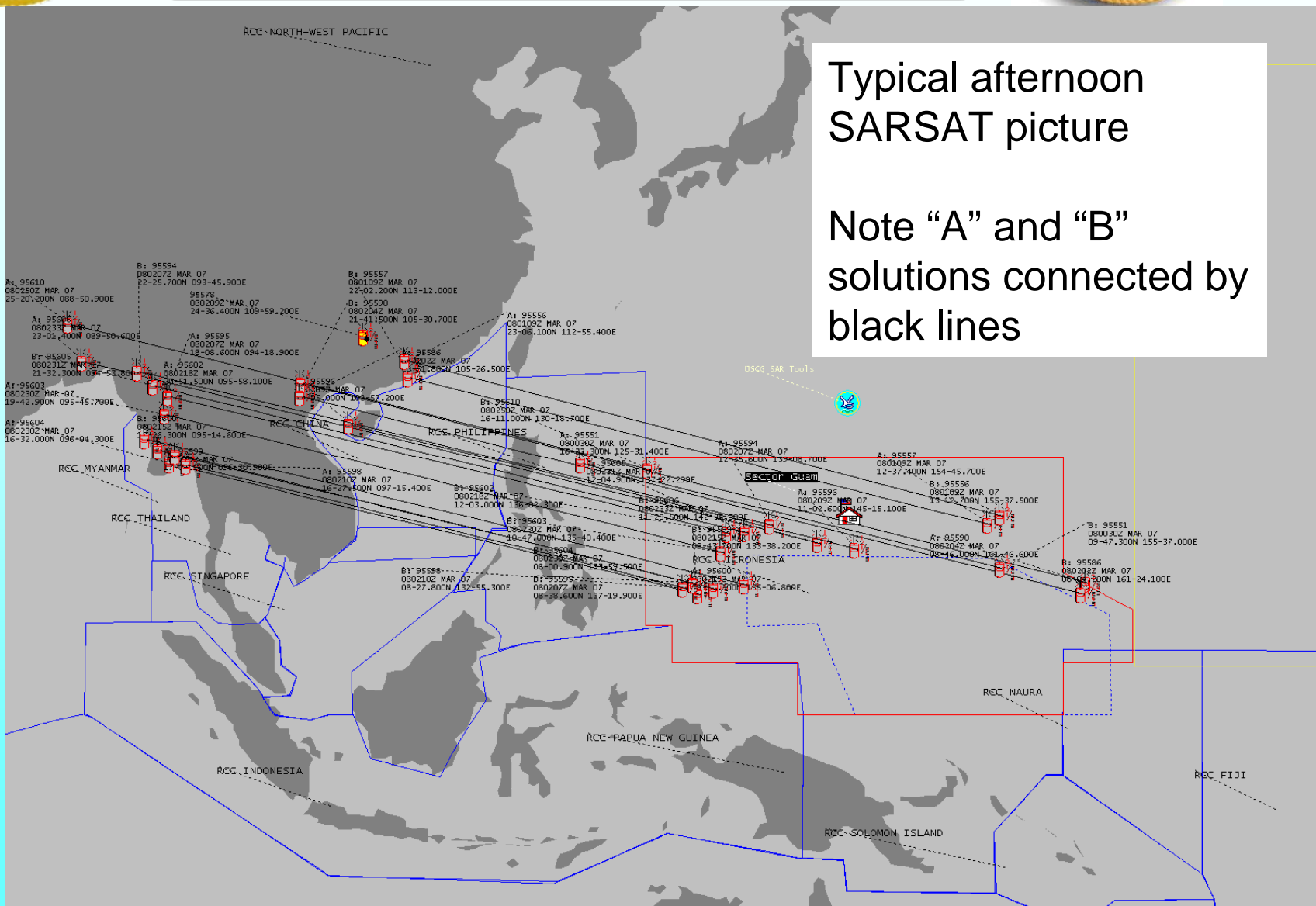
SARSAT displays 406/121.5/243 MHz beacon ELT and EPIRB activations

SAROPS used to calculate drift and generate search patterns



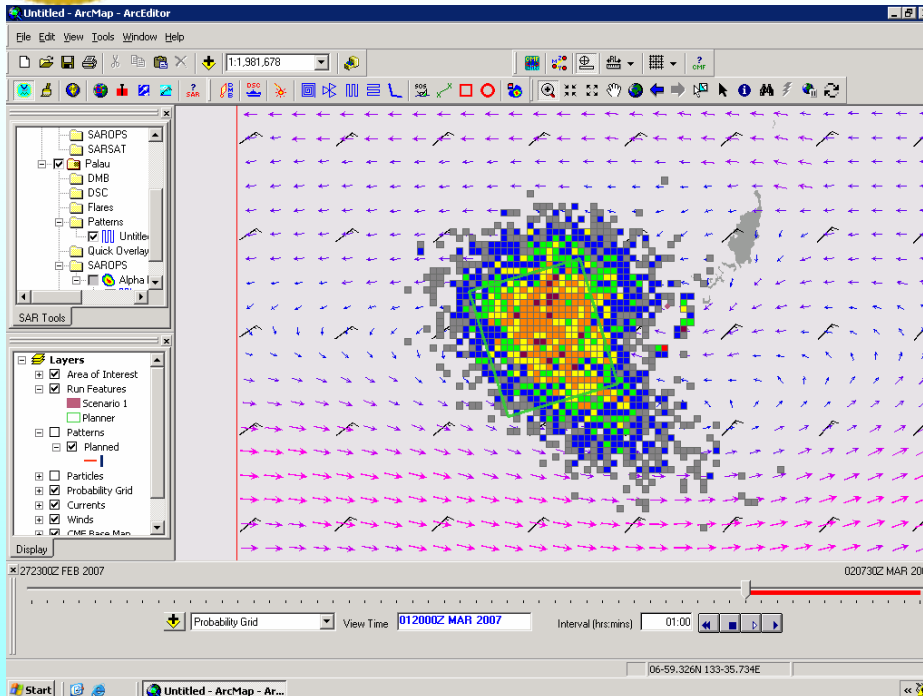


SARSAT

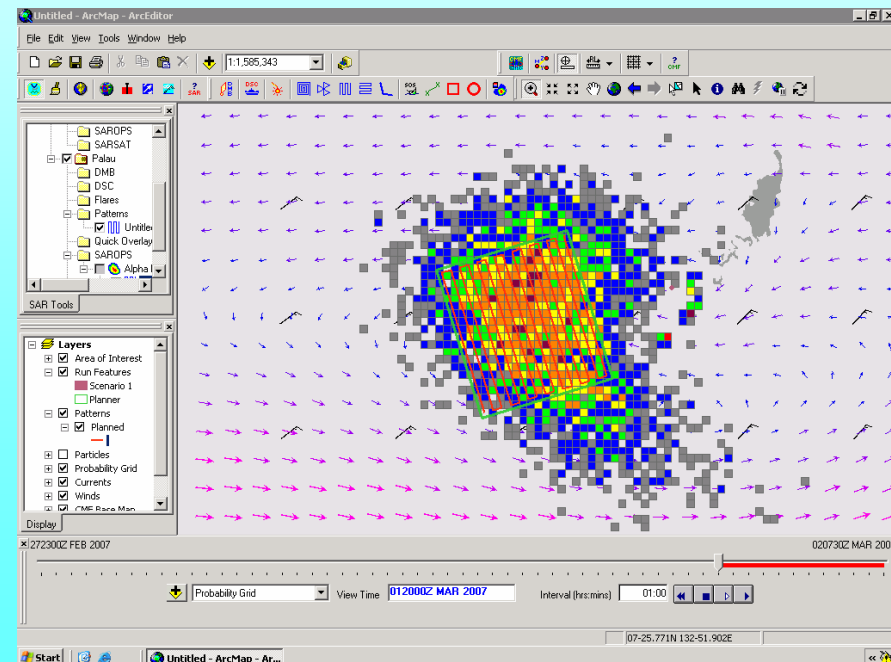




SAROPS



SAROPS computes possible drift and area of highest probability



Search pattern tool allows efficient use of available search assets



MRO Types



Types of MRO:

- **Flooding**
- **Earthquakes**
- **Terrorism**
- **HAZMAT release**
- **Aircraft Incidents**
- **Ship Incidents**





MRO Characteristics



Operational Priorities:

- Lifesaving
- Environmental protection
- Protection of property

Unique considerations:

- Recovery/preservation of evidence
- Responder safety due to unknown hazards





MRO Characteristics



- **Require immediate, well-planned, and coordinated large-scale actions from multiple organizations**
- **Intense and sustained high-priority lifesaving efforts may need to be carried out at the same time as major efforts to save the environment and property**
- **Information will be required to meet the needs of media, public, and the families of people in distress**
- **A surge in competent staffing in all key organizations must be available immediately and sustainable for up to weeks at a time**





MRO Preparation



- Requires high level of cooperation, planning, exercises, and resources
- Requires commitment of SAR authorities, regulatory authorities, transportation companies, and sources of military and commercial assistance
- SAR authorities should coordinate MRO plans with companies that operate ships and aircraft capable of carrying large numbers of people
- Planning and exercises are essential due to the rarity of MRO events.
- Due to lack of real-life practice, exercises are essential.





MRO On Scene



General guidance:

On scene responsibility for safety of passengers and crew shared by designated On Scene Coordinator (OSC) and pilot in command of distressed aircraft or master of vessel.

Pilots/masters responsible for maneuvering aircraft or ship as feasible and appropriate, maintaining responsibility for damage control, communications, and safety.

Aircraft: usually safety will dictate passengers/crew evacuate aircraft.





MRO Organization



- **OSC will be designated by SAR Mission Coordinator (SMC)**
- **OSC will handle on scene communications with remote authorities to relieve burden of pilot or master**
- **Minimize unnecessary communications**
- **High priority given to personnel accountability. If multiple life rafts are involved, consider sinking empty rafts once people are recovered to avoid re-locating empty rafts during search. Must be weighed against possibility of survivors finding empty raft.**





MRO Coordination



MRO's normally coordinated by an SMC from an RCC/RSC.

Magnitude and complexity may require coordination by an operations center higher in the agency or government.

Considerations:

- **Extensive support by organizations not commonly used for SAR.**
- **Need for extensive diplomatic support**
- **Serious problems in addition to lives in danger, such as environmental threats, terrorism, or national security issues.**





MRO Examples



Supershuttle 14 **Phillipines, 26 Feb 2004**

Fire in engine room caused by bomb
899 on board, 119 dead or missing

Rescue/Firefighting:

Philippine Navy vessel 379
Phillippine CG vessels 02, 04, 3503 & 3504 Malayan
Tugs M/V Iloilo, M/V Sikatuna & M/V Ranger
Harbor Star's Tug M/V Capella
US Marines in speedboats

Rescues:

M/V Fortune Express 463 pax / 95 crew
M/V Aleson Carrier 23 pax
F/V Allain 24 crew
M/V Queen Virgie 18 pax
M/V Princess Ivy 28 pax
M/V Princess Aida 28 pax
M/V SuperFerry 9 33 pax.

Herma Shipping's **M/T Petrotrade** assisted by
monitoring & relaying vital information. **(OSC)**





MRO Examples



KAL Flight 801 Guam, 06 August 1997

254 Pax/crew, 26 survivors

Rescue/Firefighting/medical:

Government of Guam

National Guard

U.S. Navy

Aircraft:

US Coast Guard

US Navy





MRO Examples



TWA Flight 800
New York, 17 July 1996
230 pax/crew, no survivors

Search/recovery:

NOAA R/V Rude
18x USCG Cutters
28x USCG small boats
4x USN ships
2x USN Helicopter Squadrons
Fishing vessels
NY Fire Department
Local Volunteer Fire Department
Red Cross

Dozens of other agencies

Investigation:

FBI, ATF, NTSB, FAA, Secret Service, U.S.
State Department, Naval Criminal
Investigative Service, Suffolk County Medical
Examiner's Office, U.S. Park Police, INS





MRO Planning Tools



Checksheets:

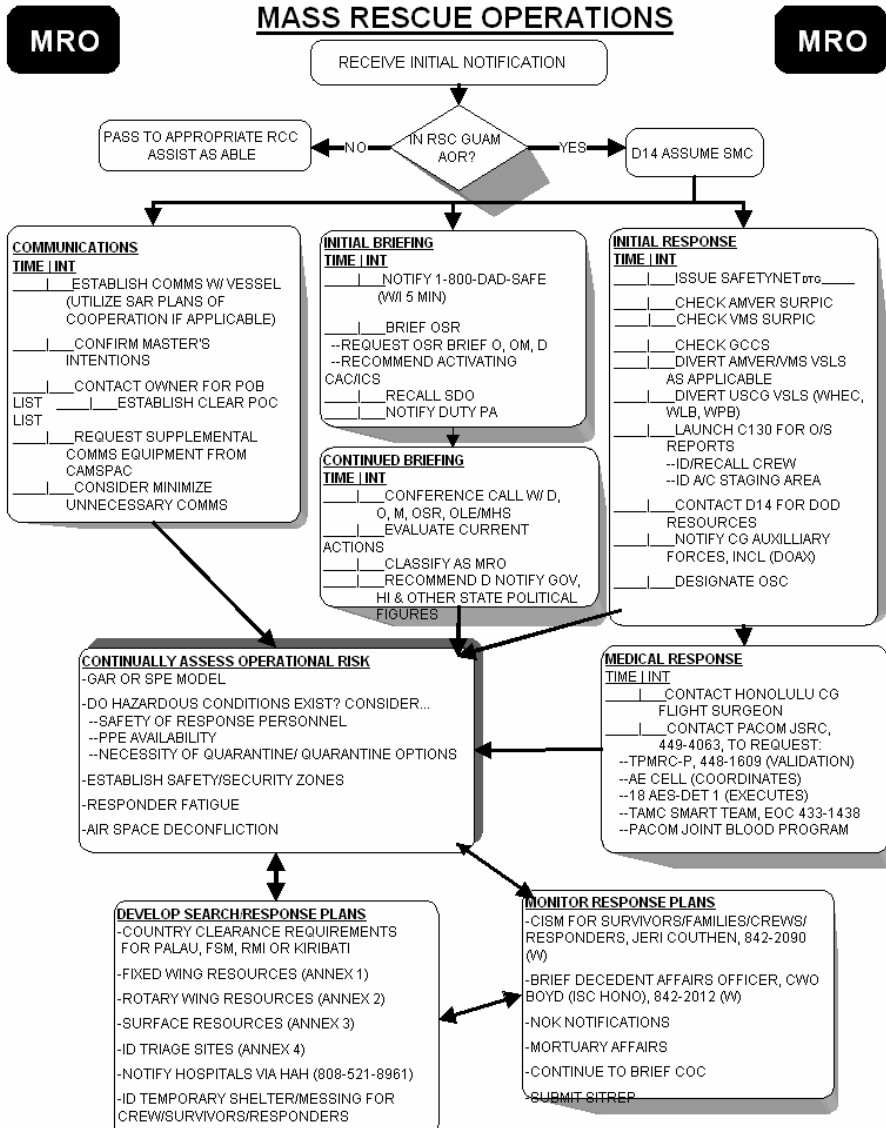
Surface
Rotary
Fixed Wing
Triage Sites

MASS RESCUE OPERATIONS ANNEX 3 SURFACE RESOURCES

OWNER/POC	# & TYPE AVAILABLE	RESPONSE TIME	ENDURANCE (HRS)	COMMS FREQS/ COMMENTS
Atlantis Guam Inc. Eric Lewis 671-477-6897/8	Flipper I 47' Flipper II 47' (Catamaran)	2 hours (If no crew available)	14	Marine-band VHF
Scuba Company Rick Tuncap 671-646-4674	Andromeda I 46' Delphinus 42' Oceanus 38'	2 hours	24	Marine-band VHF
Guam Nautical Inc Bret Cornelious 671-727-6040	Capt. Cocos (Catamaran 40' Aluminum)	1 hour or less	6-8	Marine-band Vhf
Malesso Boats Inc Greg Pynes 671-828-8691	Ex-Tasi I 41' Double decker Contessa 41'	1 hour or less	6-8	Marine-band VHF
Wang Jen-Nan Jackey Wang 671-688-7980	Discovery 32' (Catamaran) Si Serena 50'	1 hour 1 hour	6-8	Marine-band VHF
MDA Scott Peterson 671-687-6436	Sun Chaser 42' Reef Dreams 29'	1 hour or less	6-8	Marine-band VHF
Tasi Tours Inc Roy Brown 671-688-0100	Sea Odyssey II Catamaran 48' Sea Spinner Mono-hull 48'	1 hour or less	6-8	Marine-band VHF
Alupang Beach Club Art Becastro	Skyrider I-V Island Hopper 30'	1 hour or less	6-8	Marine-band VHF



MRO Planning Tools



Flowchart with
checksheet



MRO Exercises



OBJECTIVES

Account for

- Crew and pax lists
- Rescued pax and crew
- All rescue personnel
- Lifeboats, incl. empty boats
- High freeboard issues for rescue boats

ID and task

- AMVER
- Rescue resources ashore and afloat (from checksheet)
- Local agency resources (medical, fire, general community, transportation.
- National and regional military





MRO Exercises



OBJECTIVES Cont.



Test/Evaluate

- Notification process
- Resource availability
- Timeliness of response
- Overall coordination
- Understanding of agency roles
- OSC capabilities
- Span of control
- Evacuation
- Comms (RCC-RCC, govt-industry, RCC-OSC, on scene, shore-ship, ground-air, ship-air, etc.)
- Media management



MRO Exercises



OBJECTIVES Cont.



Test/Evaluate

Mass Casualty Response

- Performance of emergency medical system
- Procedures for next-of-kin notification for both injured and dead
- Availability of temporary mortuary facilities

